

State of Tennessee
 Department of Environment and Conservation
 Division of Air Pollution Control
 William R. Snodgrass Tennessee Tower
 312 Rosa L. Parks Avenue, 15th Floor
 Nashville, TN 37243
 Telephone: (615) 532-0554



APC 100

NON-TITLE V PERMIT APPLICATION FACILITY IDENTIFICATION

Please type or print and submit in duplicate for each emission source. Attach appropriate source description forms.				
SITE INFORMATION				
1. Organization's legal name Tennessee Department of Safety and Homeland Security			For APC use only	APC Company point no.
2. Site name (if different from legal name) Dover Radio Site				APC Log/Permit no.
3. Site address (St./Rd./Hwy.) Forest Tower Road			County name Stewart	
City or distance to nearest town Dover		Zip code 37058	4. NAICS or SIC code 922120	
5. Site location (in lat. /long.)	Latitude 36 25 3.89 N		Longitude 87 50 52.25 W	
CONTACT INFORMATION (RESPONSIBLE PERSON)				
6. Responsible person/Authorized contact Stephen Philyaw			Phone number with area code 615-365-1664	
Mailing address (St./Rd./Hwy.) 225 Ezell Pike			Fax number with area code 615-360-8033	
City Nashville	State TN	Zip code 37217	Email address stephen.philyaw@tn.gov	
CONTACT INFORMATION (TECHNICAL)				
7. Principal technical contact Stephen Philyaw			Phone number with area code 615-365-1664	
Mailing address (St./Rd./Hwy.) 225 Ezell Pike			Fax number with area code 615-360-8033	
City Nashville	State TN	Zip code 37217	Email address stephen.philyaw@tn.gov	
CONTACT INFORMATION (BILLING)				
8. Billing contact TN Dept. of Safety/Homeland Security-Fiscal Services Division-Christine Tyus			Phone number with area code 615-251-5138	
Mailing address (St./Rd./Hwy.) 1150 Foster Ave			Fax number with area code 615-253-2652	
City Nashville	State TN	Zip code 37243	Email address Bill.Walker@tn.gov	
EMISSION SOURCE INFORMATION				
9. Emission source no. (number which uniquely identifies this source) J130580677				
10. Brief description of emission source One (1) 50KW Propane Emergency Standby Generator, GM 5.0L, Cummings 50GGPC Date of Manufacture: October 2013				
11. Normal operation:	Hours/Day Emergency Use	Days/Week Emergency Use	Weeks/Year Emergency Use	Days/Year Emergency Use
12. Percent annual throughput	Dec. – Feb. 25%	March – May 25%	June – August 25%	Sept. – Nov. 25%

(Over)

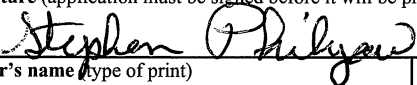
TYPE OF PERMIT REQUESTED				
13. Operating permit ()	Date construction started	Date completed	Last permit no.	Emission source reference number
Construction permit (X)	Last permit no. None		Emission source reference number	
If you choose Construction permit, then choose either New Construction, Modification, or Location transfer				
	New Construction (X)	Starting date 3rd Quarter, 2014	Completion date 4th Quarter, 2014	
	Modification ()	Date modification started or will start	Date completed or will complete	
	Location transfer ()	Transfer date	Address of last location	
14. Describe changes that have been made to this equipment or operation since the last construction or operating permit application:				
None				
SIGNATURE				
Based upon information and belief formed after a reasonable inquiry, I, as the responsible person of the above mentioned facility, certify that the information contained in this application and any attached application(s) is accurate and true to the best of my knowledge. As specified in TCA Section 39-16-702(a)(4), this declaration is made under penalty of perjury.				
15. Signature (application must be signed before it will be processed)			Date	
			6-13-14	
Signer's name (type of print) Stephen Philyaw		Title Radio Systems Analyst	Phone number with area code 615-365-1664	

Table of Pollution Reduction Device or Method Codes

Note: For cyclones, settling chambers, wet scrubbers, and electrostatic precipitators; the efficiency ranges correspond to the following percentages:

High: 95-99+% Medium: 80-95% And Low: Less than 80%.

If the system has several pieces of connected control equipment, indicate the sequence. For example: 008'010.97%

If none of the below codes fit, use 999 as a code for other and specify in the comments.

No Equipment.....	000	Limestone Injection – Dry.....	041
Activated Carbon Adsorption.....	048	Limestone Injection – Wet.....	042
Afterburner – Direct Flame.....	021	Liquid Filtration System.....	049
Afterburner – Direct Flame with Heat Exchanger.....	022	Mist Eliminator – High Velocity.....	014
Afterburner – Catalytic.....	019	Mist Eliminator – Low Velocity.....	015
Afterburner – Catalytic with Heat Exchanger.....	020	Process Change.....	046
Alkalized Alumina.....	040	Process Enclosed.....	054
Catalytic Oxidation – Flue Gas Desulfurization.....	039	Process Gas Recovery.....	060
Cyclone – High Efficiency.....	007	Settling Chamber – High Efficiency.....	004
Cyclone – Medium Efficiency.....	008	Settling Chamber – Medium Efficiency.....	005
Cyclone – Low Efficiency.....	009	Settling Chamber – Low Efficiency.....	006
Dust Suppression by Chemical Stabilizers or Wetting Agents.....	062	Spray Tower (Gaseous Control Only).....	052
Electrostatic Precipitator – High Efficiency.....	010	Sulfuric Acid Plant – Contact Process.....	043
Electrostatic Precipitator – Medium Efficiency.....	011	Sulfuric Acid Plant – Double Contact Process.....	044
Electrostatic Precipitator – Low Efficiency.....	012	Sulfur Plant.....	045
Fabric Filter – High Temperature.....	016	Vapor Recovery System (Including Condensers, Hooding and Other Enclosures).....	047
Fabric Filter – Medium Temperature.....	017	Venturi Scrubber (Gaseous Control Only).....	053
Fabric Filter – Low Temperature.....	018	Wet Scrubber – High Efficiency.....	001
Fabric Filter – Metal Screens (Cotton Gins).....	059	Wet Scrubber – Medium Efficiency.....	002
Flaring.....	023	Wet Scrubber – Low Efficiency.....	003
Gas Adsorption Column – Packed.....	050	Wet Suppression by Water Sprays.....	061
Gas Adsorption Column – Tray Type.....	051		
Gas Scrubber (General: Not Classified).....	013		

Table of Emission Estimation Method Codes

Not application / Emissions are known to be zero.....	0
Emissions based on source testing.....	1
Emissions based on material balance using engineering expertise and knowledge of process.....	2
Emissions calculated using emission factors from EPA publications No. AP-42 Compilation of Air Pollution Emissions Factors.....	3
Judgment.....	4
Emissions calculated using a special emission factor different from that in AP-42.....	5
Other (Specify in comments).....	6

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APC 101

NON-TITLE V PERMIT APPLICATION EMISSION POINT DESCRIPTION

Please type or print and submit in duplicate for each stack or emission source. Attach to the Non-Title V Facility Identification Form (APC 100).							
GENERAL IDENTIFICATION AND DESCRIPTION							
1. Organization name Tennessee Department of Safety and Homeland Security						For APC use only	APC Company point no.
2. Emission source no. (As on Non-Title V Facility Identification Form) J130580677							APC Log/Permit no.
3. Brief emission point description (Attach a sketch if appropriate): One (1) 50KW Propane Emergency Standby Generator, GM 5.0L, Cummings 50GGPC Date of Manu						Distance to nearest property line (Ft.)	
STACK AND EMISSION DATA							
4. Stack or emission point data:	Height above grade (Ft.) → approximately 6 ft	Diameter (Ft.) .229	Temperature (°F) 1204	% of time over 125°F 100	Direction of exit (Up, down or horizontal) UP		
Data at exit conditions: →	Flow (actual Ft. ³ /Min.)	Velocity (Ft./Sec.)	Moisture (Grains/Ft. ³)		Moisture (Percent)		
Data at standard conditions: →	Flow (Dry std. Ft. ³ /Min.)	Velocity (Ft./Sec.)	Moisture (Grains/Ft. ³)		Moisture (Percent)		
5. Air contaminants	Actual emissions						
	Emissions (Lbs./Hr.)						
Particulate matter	Average	Maximum	Concentration				
Sulfur dioxide (SO ₂)			***				
Carbon monoxide (CO)		8.73	PPM	2.61	6	000	
Organic compounds			PPM				
Nitrogen oxides (NO _x)		1.2	PPM	.360	6	000	
Fluorides							
Greenhouse gases (CO ₂ equivalents)							
Hazardous air pollutant (specify)							
Hazardous air pollutant (specify)							
Other (specify)							
Other (specify)							
Other (specify)							

(Over)

6. Check types of monitoring and recording instruments that are attached: Opacity monitor (), SO ₂ monitor (), NO _x monitor (), Other (specify in comments) ()	
7. Comments Calculations derived using information provided from manufacturer.	
8. Control device or Method code description:	Description of operating parameters of device (flow rate, temperature, pressure drop, etc.):

* Refer to the tables below for estimation method and control device codes.

** Exit gas particulate matter concentration units: Process – Grains/Dry Standard Ft³ (70°F), Wood fired boilers - Grains/Dry Standard Ft³ (70°F), all other boilers – Lbs. /Million BTU heat input.

*** Exit gas sulfur dioxide concentrations units: Process – PPM by volume, dry bases, and boilers – Lbs. /Million BTU heat input

Table of Pollution Reduction Device or Method Codes
(Alphabetical listing)

Note: For cyclones, settling chambers, wet scrubbers, and electrostatic precipitators; the efficiency ranges correspond to the following percentages:

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If the system has several pieces of connected control equipment, indicate the sequence. For example: 008'010.97%

If none of the below codes fit, use 999 as a code for other and specify in the comments.

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APC 102

NON-TITLE V PERMIT APPLICATION PROCESS OR FUEL BURNING SOURCE DESCRIPTION

Please type or print and submit in duplicate and attach to the Non-Title V Facility Identification Form (APC 100).			
GENERAL IDENTIFICATION AND DESCRIPTION			
1. Organization name Tennessee Department of Safety and Homeland Security	For APC use only	APC Company – Point no.	
2. Emission source no. (As on Non-Title V Facility Identification Form) J130580677		APC Log/Permit no.	
3. Description of process unit One (1) 50KW Propane Emergency Standby Generator, GM 5.0L, Cummings 50GGPC Date of Manufacture: October, 2013.			
PROCESS SOURCE DESCRIPTION AND DATA			
4. Type of source		(Check only one option below)	
Process Source: Apply for a separate Permit for each source. (Check at right and complete lines 5, 6, and 11)		()	
Process Source with in process fuel: Products of combustion contact materials heated. Apply for a separate permit for each source. (Check at right and complete lines 5, 6, and 8 through 11)		()	
Non-Process fuel burning source: Products of combustion do not contact materials heated. Complete this form for each boiler or fuel burner and complete a Non-Title V Emission Point Description Form (APC 101) for each stack. (Check at right and complete lines 7 to 11)		(X)	
5. Type of operation: Continuous () Batch ()		Normal batch time	Normal batches/day
6. Process material inputs and In-process solid fuels	Diagram reference	Input rates (pounds/hour)	
		Design	Actual
A. N/A	+		
B.			
C.			
D.			
E.			
F.			
G.			
Totals			

* A simple process flow diagram must be attached.

(Over)

BOILER, BURNER, GENERATOR, OR SIMILAR FUEL BURNING PROCESS DESCRIPTION								
7. Boiler or burner data: (Complete lines 7 to 11 using a separate form for each boiler, burner, etc.)								
Number	Stack number**	Type of firing***	Rated horsepower	Rated input capacity (10 ⁶ BTU/Hr.)	Other rating (specify capacity and units)			
01	1	Propane Spark ingited	79		50 KW			
Serial no.	Date constructed	Date manufactured	Date of last modification (explain in comments below)					
	Not Constructed Yet	October, 2013	None					
** Source with a common stack will have the same stack number. *** Cyclone, spreader (with or without reinjection), pulverized (wet or dry bottom, with or without reinjection), other stoker (specify type, hand fired, automatic, or other type (describe below in comments)).								
FUEL USED IN BOILER, BURNER, GENERATOR, OR SIMILAR FUEL BURNING SOURCE								
8. Fuel data: (Complete for a process source with in process fuel or a non-process fuel burning source)								
Primary fuel type (specify) Liquid Propane				Standby fuel type(s) (specify)				
Fuels used	Annual usage	Hourly usage		% Sulfur	% Ash	BTU value of fuel	(For APC use only) SCC code	
		Design	Average					
Natural gas:	10 ⁶ Cu. Ft.	Cu. Ft.	Cu. Ft.	/ / / /	/ /	1,000		
				/ / / /	/ /			
#2 Fuel oil:	10 ³ Gal.	Gal.	Gal.		/ /			
					/ /			
#5 Fuel oil:	10 ³ Gal.	Gal.	Gal.		/ /			
					/ /			
#6 Fuel oil:	10 ³ Gal.	Gal.	Gal.		/ /			
					/ /			
Coal:	Tons	Lbs.	Lbs.					
Wood:	Tons	Lbs.	Lbs.	/ / / /	/ /			
				/ / / /	/ /			
Liquid propane:	10 ³ Gal. Negligible	Gal.	Gal. 7.4	/ / / /	/ /	85,000		
				/ / / /	/ /			
Other (specify type & units):								
9. If Wood is used as a fuel, specify types and estimate percent by weight of bark								
10. If Wood is used with other fuels, specify percent by weight of wood charged to the burner.								
11. Comments								
Standby Emergency Generator- usage depends of commercial power losses.								